Docket No. 30004773-1 (1509-135) PATENT

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THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	
Inventors: James Thomas Edward MCDONNELL et al.	: Confirmation No. 6368
U.S. Patent Application No. 09/715,131	: Group Art Unit: 2686
Filed: November 20, 2000	: Examiner: Khawar IQBAL
For: DATA TRANSFER SYSTEM AND METHOD C	

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Attn: BOARD OF PATENT APPEALS AND INTERFERENCES

BRIEF ON APPEAL

Further to the Notice of Appeal filed July 6, 2006, in connection with the above-identified application on appeal, herewith is Appellant's Brief on Appeal. The Commissioner is authorized to charge Deposit Account No. 08-2025 in the amount of \$500 for the statutory fee.

To the extent necessary, Appellant hereby requests any required extension of time under 37 C.F.R. §1.136 and hereby authorizes the Commissioner to charge any required fees not otherwise provided for to Deposit Account No. 08-2025.

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transmitting, via a r device of data on a	disclose the requirement of independent claims 31 narrow bandwidth, long-range link, a notification to a network awaiting transfer (claims 31 and 33), or a to the mobile device from the network	a mobile vailable for
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I. Real Party in Interest

The real party in interest is Hewlett Packard Development Company, L.P., a Texas limited partnership.

li. Related Appeals and Interferences

There are no related appeals and/or interferences.

III. Status of Claims

Claims 31, 33, 35-46, 53-56, 59-61, 63, 67, 69, 79-84 are pending.

No claims have been allowed.

Claims 1-30, 32, 34, 47-52, 57, 58, 62, 64-66, 68 and 70-78 have been canceled.

Claims 31, 33, 35-45, 53-56, 59, 61, 63, 67, 69, 79-84 are rejected under 35 U.S.C. 102(e) as being anticipated by Rautila (20040171378). Claims 46, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rautila (20040171378) and further in view of Aho et al (6198941).

IV. Status of Amendments

All amendments have been entered.

V. Summary of Claimed Subject Matter

Because independent apparatus claim 31 and method claim 33 are similar their features are summarized together.

Network 12, that can be the Internet, and mobile device 18, that can be a mobile telephone, personal digital assistant (PDA) or a laptop computer (page 12, lines 6-10, 18, page 16, lines 9, 10), communicate with each other by narrow bandwidth link A and wide bandwidth link 22, respectively having relatively long and relatively short ranges (page 12, lines 6-19, page 12, line 30-page 13, line 6, page 13, line 10). The narrow bandwidth, long-range link originates at network 12, thence to public land mobile network (PLMN) 14 and extends from transceiver 26 to transceiver 19 (page 12, line 29-page 13, line 6). The wide bandwidth, short-range link also originates at network 12, thence to wide band short range (WBSR) base station 16 and extends to transceiver 20 (page 12, lines 13, 14); transceivers 19 and 20 are on mobile device 18 (page 5, lines 23-30, page 12, lines 7-9, lines 12-14, page 3, lines 23-26, page 7, lines 26-30). The narrow bandwidth, long-range link notifies mobile device 18 that data on network 12 are awaiting transfer to the mobile device from network 12 (page 5, lines 10-17, page 6, lines 24, 25, steps 101-104, Figure 4, page 16, line 23-page 17, line 2). The data on network 12 are transferred from network 12 to mobile device 18 via the wide bandwidth, long-range link unless the mobile device is outside the range of the wide bandwidth, short-range link. If the mobile device is outside the range of the wide bandwidth link, the data on the network are selectively immediately transferred to the mobile device 18 via the narrow bandwidth, long-range link (steps 104, 105, page 19, lines 2-6) or are subsequently transferred to the mobile device via the wide bandwidth, short-range link when the mobile device is in range of the wide bandwidth short-range base station 16 (page 13, lines 8-13, page 13, lines 28-30, page 11, line 28-page 12, line 1, page 14, lines 14-23, steps 107-110, Figure

4). The user of mobile device 18 can decide whether the data are transmitted immediately or subsequently (steps 104, 105, page 19, lines 2, 3) or software on mobile device 18 or base station 16 can make this decision (page 17, lines 20-23, page 18 lines 13-18, page 15, lines 27-30).

Claim 53 defines network 12, mobile device 18, and first and second transmitters, respectively included in transceiver 26 and wide bandwidth short-range base station 16. The first and second transmitters respectively transmit a first narrow bandwidth long-range signal and a second wide bandwidth short range signal (page 12, line 6-19, page 12, line 30-page 13, line 6, page 13, line 10). The narrow band width long-range signal indicates data on network 12 are available to be transferred to mobile device 18 (page 5, lines 10-17, page 6, lines 24, 25, steps 101-104, Figure 4, page 16, line 23-page 17, line 2). The mobile device 18 and the long range, narrow bandwidth transmitter of transceiver 26 are such that the long range transmitter can transmit the data on network 12 to mobile device 18 and the mobile device can receive the data on the network via the transmission from the narrow bandwidth and wide bandwidth transmitters of transceiver 26 and base station 16, respectively (page 12, lines 13, 14, page 5, lines 23-30, page 12, line 7-9, lines 12-14, page 3, lines 23-26, page 7, lines 26-30). Network 12 transmits data on network 12 to wide bandwidth, short range base station 16 in response to a transmission resulting from an input by a user of mobile device 18 that the user wants to receive the data (step 109, page 19, lines 21-24).

Claim 63 is concerned with transferring data between mobile device 18 and network 12 via a link between the narrow band, long range transmitter of transceiver

26 and transceiver 19 on mobile device 18 and a short range, wide bandwidth link between the transceiver of short range, wide bandwidth base station 16 and transceiver 20 on mobile device 18 (page 12, lines 6-19, page 12, line 30-page 13, line 6, page 13, line 10). Claim 63 is broad enough to cover transmission of the data in either direction.

In one scenario, network 12 transmits, via transceiver 26, to transceiver 19 on mobile device 18 a narrow bandwidth signal indicating that the network is ready to send data to mobile device 18 (page 12, line 6-19, page 12, line 30-page 13, line 6, page 13, line 10). A schedule for sending of the data from network 12 to mobile device 18 via the long-range or short-range link is prepared. The data are transferred, based on the schedule, from network 12 to mobile device 18 via either the high or low bandwidth link (page 10, lines 22-24, page 15, line 18, page 18, lines 4-8). In another scenario, transceiver 19, on mobile device 18, transmits to network 12 a narrow bandwidth signal indicating the mobile device is ready to transmit data to the network (page 15, lines 12-14). In such a case, a schedule for sending of the data from mobile device 18 to network 12 via the long-range or short-range link is prepared. The data are transferred, based on the schedule, from mobile device 18 to network 12 via either the high or low bandwidth link.

Claim 35, which depends on claim 33, indicates the user of mobile device 18 makes the decision to (1) transfer the data on network 12 to mobile device 18 immediately after the notifying step via the narrow bandwidth link if the mobile device is not in range of the short range link or (2) subsequently transmit the network data when the mobile device is in range of the short range link in response to a user input

at mobile device 18 (page 13, lines 8-13, step 104, Figure 4, page 19, lines 2 and 3). Alternatively, as respectively defined by claims 36 and 37, software on mobile device 18 or in wide bandwidth base station 16 of network 12 makes such a decision (page 17, lines 20-23, page 18, lines 13-18 (for claim 36) and page 15, lines 27-30 (for claim 37)).

Claim 67 is directed to a converter for use with mobile device 18 and the Internet. The converter includes an interface that interfaces with mobile device 18 and the wide band link, including transceiver 20, such that the converter causes mobile device 18 to perform the method previously discussed in connection with claim 33 (page 9, lines 16-20, page 10, lines 14-20, page 16, lines 12-17).

VI. Grounds of Rejection to be Reviewed on Appeal

The main Issues to be resolved on Appeal are the anticipation rejections, based on Rautila, of independent claims 31, 33, 53 and 63, as well as dependent claims 35-37 and 67.

An ancillary Issue concerning claims 31, 33 and 53 is that Rautila fails to disclose transmitting via a narrow bandwidth, long range link a notification to a mobile device of data on a network awaiting transfer (claims 31 and 33), or available to be transferred (claim 53), to the mobile device from the network. A further ancillary issue with regard to claims 31 and 33 is that Rautila fails to disclose causing transfer of the data on the network via a wide bandwidth, short range link to a mobile device unless the mobile device is outside the range of the wide bandwidth link, in which case the data are selectively immediately transferred to the mobile device via the narrow bandwidth link or are subsequently transferred to the mobile device via the wide bandwidth link when the mobile device is in range of the wide bandwidth link. An additional ancillary issue is that Rautila fails to disclose scheduling as claim 63 requires. Another ancillary issue is that Rautila does not disclose the features of dependent claims 36, 37 and/or 67.

VII. Argument

A. Rautila fails to disclose the requirement of independent claims 31, 33 and 53 of transmitting, via a narrow bandwidth, long-range link, a notification to a mobile device of data on a network awaiting transfer (claims 31 and 33), or available for transfer (claim 53), to the mobile device from the network.

The office action, at the first three lines of page 3, erroneously alleges Rautila discloses, at paragraphs 0030-0031, the requirement of claim 31 for a transmitter arrangement for notifying, via a narrow bandwidth link, a mobile device of data on a network awaiting transfer to the mobile device from the network. The office action, in connection with the rejection of claim 31, erroneously states the notification is in the form of a unique order number transmitted to mobile device 10 via the cellular phone capability of the mobile device.

Rautila indicates the unique order number is transmitted during operation 400, Figure 4, after a user of mobile device 10 has decided, during operation 380, that the user does not want to download an electronic file at a hotspot, but wants to download the electronic file via the cellular phone capability of the mobile device; paragraph 0031, penultimate sentence. As indicated by Figure 4 and the description thereof in paragraphs 0030 and 0031, the user's decision at operation 380 occurs after the user of mobile device 10 has gained access to the Internet during operation 310, has selected an electronic web page from shop server 40 during operation 320, placed a purchase order during operation 340 and made payment arrangements during operation 350. After operation 350, the user of mobile device 10, at operation 360,

initially makes a decision to transfer the electronic file he purchased during operation 350 through a narrow bandwidth, short range link resulting from the user being close to a hotspot, rather than via the cellular telephone capabilities of mobile device 10. Apparently, the user changed his mind and decided, during operation 380, to have the electronic file transferred to mobile device 10 via the long-range, narrow bandwidth cellular telephone capabilities of mobile device 10.

Based on the foregoing, transmitting the unique order number to mobile device 10 is in response to activities by the user of mobile device 10 and has nothing to do with a long range, narrow band-width link notifying mobile device 10 that data from a network are awaiting transfer to the mobile device from the network, as claims 31 and 33 require. In addition, transmitting the unique order number to mobile device 10 has nothing to do with such a narrow band-width link transmitting a signal indicating data on a network are available to be transferred to a mobile device, as claim 53 requires. The unique order number is a data item, not a notification that data from a network are awaiting transfer to mobile device 10. A further indication that transmitting the order number is not a notification that data from a network are awaiting transfer to mobile device 10 is that the module of Figure 4 ends immediately after transmission of the order number. If transmission of the order number were a notification that data from a network is awaiting transfer to mobile device 10, Figure 4 would include a data transmission step after operation of 400.

The last three lines of page 3 of the office action indicate the requirement of claim 33 for notifying the mobile device of data on the network awaiting transfer to the mobile device from the network by transmitting a narrow bandwidth, long-range signal

from the network to the mobile device is disclosed by Rautila at paragraphs 0030-0032, 0034. Appellants have indicated above that paragraphs 0030 and 0031 do not disclose the foregoing feature of claim 33. Paragraph 0032 is concerned with the flow diagram of Figure 5 that describes the operation of hotspot download module 270, Figure 3. As such, paragraph 0032 relates to operations associated with a wide bandwidth, short-range signal and has nothing to do with transmitting a narrow bandwidth, long-range signal used for notifying a mobile device of data on a network awaiting transfer to the mobile device. Paragraph 0034 includes a description of the flow diagram of Figure 7, relating to order/location module 290 (Figure 3) of electronic shop server 40. Paragraph 0034 indicates all activities associated with gaining access to the Internet 150 are in response to activities by user 20 of mobile device 10. It also indicates the unique order number is transmitted in response to user activity, rather than in response to the mobile device being notified of data on the network awaiting transfer to the mobile device from the network by transmitting a narrow bandwidth, long-range signal from the network to the mobile device. Hence, claim 33 is improperly rejected as being anticipated by Rautila.

The paragraph bridging pages 5 and 6 of the action erroneously indicates paragraphs 0024, 0025 and 0030-0032 of Rautila disclose the requirement of claim 53 for a narrow bandwidth, long-range signal to indicate data on a network are available to be transferred to a mobile device. Appellants have previously indicated, in connection with the rejections of claims 31 and 33, why paragraphs 0030-0032 of Rautila do not disclose a narrow bandwidth, long-range signal that indicates data on a network are available to be transferred to a mobile device. Paragraph 0024 includes a

general description of the overall system of Figure 1 and of mobile station or device 10, as illustrated in Figure 2. The last two sentences of paragraph 0024 also indicate user 20 proactively discovers electronic shop server 40. In other words, these two sentences are completely contrary to the concept of a narrow bandwidth, long-range signal indicating data on a network are available to be transferred to a mobile device. Paragraph 0025 implies that after the user of mobile station 10 has accessed electronic shop server 40, the shop server provides mobile station 10 with a menu of digital products available for purchase by user 20 of mobile device 10. There is nothing in paragraph 0025 disclosing transmission of a narrow bandwidth, long-range signal indicating data on a network are available to be transferred to mobile device 10.

The Response to Arguments in the paragraph bridging pages 7 and 8 of the office action accurately summarizes certain aspects of Rautila. However, there is no explanation in this paragraph, or anywhere else in the office action, of how the Rautila reference discloses transmission of a narrow bandwidth, long-range signal indicating data on a network are available to be transferred to mobile device 10. In fact, the last sentence of the Response to Arguments supports appellants' position that the unique order number is transmitted in response to a decision by user 20, a feature that is completely contrary to appellants' use of a narrow bandwidth, long-range signal to notify a user that data on a network are available to be transferred to a mobile device. Based on the foregoing, the anticipation rejections of claims 31, 33 and 53 are wrong.

B. Rautila fails to disclose scheduling, as claim 63 requires.

Page 6 of the office action alleges paragraphs 0024, 0025, 0030-0032 and 0034 of Rautila disclose the scheduling requirement of claim 63. However, scheduling is never mentioned in any of these paragraphs of Rautila and the office action fails to provide any explanation of how the scheduling requirement is provided by these paragraphs. The penultimate and last sentences of paragraph 0025 and the last several sentences of paragraph 0030 discuss determining the estimated time it would take for a digital product to be downloaded from the electronic shop server 42 to mobile device 10 using cellular phone capabilities. The determination enables a user of the mobile device 10 to perform a cost-benefit analysis. However, this is not the same as scheduling the sending of data from the electronic shop server 42 to mobile device 10. Because there is no disclosure in paragraphs 0025 and/or 30 of scheduling the sending of data, the requirement of claim 63 to transfer data based on the schedule cannot be found in paragraph 0025 or 0030. Paragraph 0031 has no reference to scheduling or temporal considerations.

Paragraph 0032 indicates that if the user 20 of mobile device 10 confirms a request to download a digital product, then processing proceeds such that hotspot network 50 begins transmission of a digital product to mobile device 10 via hotspot device 90. During transmission of the digital product, hotspot network 50 may also transmit advertisements to be shown on display 200 of mobile station 10. Because the time to transmit varies according to the size of the digital product, the amount of advertising may vary from a few seconds to several minutes. After the digital product has been transmitted by hotspot network 50 to mobile station 10, the mobile station is

notified that a download process has been completed. Thus, even though paragraph 0032 discusses certain temporal aspects, there is no disclosure of these temporal aspects being related to scheduling the sending of data.

Paragraph 0034 indicates that after payment arrangements have been accomplished, order/location module 290 of the electronic shop server 40 (Figure 3) proceeds to operation 810, during which time module 290 determines whether user 20 of mobile device 10 desires to have a digital product downloaded to hotspot network location 50. This is the only hint in paragraph 0034 of anything related to time. However, the foregoing portion of paragraph 0034 has nothing to do with scheduling the sending of data.

Based on the foregoing, none of paragraphs 0024, 0025, 0030-0032 and/or 0034 discloses the scheduling requirements of claim 63, so the anticipation rejection of claim 63 is wrong.

C. Dependent claims 36, 37 and 67 are improperly rejected.

Page 4 of the office action states Boyle et al, at paragraphs 0030-0032, 0034, discloses the features of claim 36. There is no other mention of Boyle et al in the office action. Presumably the office action should have said paragraphs 0030-0032, 0034 of Rautila disclose the features of claim 36 since page 2 of the office action states claim 36 is anticipated by Rautila. Appellant will proceed on this assumption because there are no numbered paragraphs in the Boyle et al reference (US 6,665,711) of record. However, appellant is unable to find any indication in

paragraphs 0030-0032 and/or 0034 of Rautila disclosing software on mobile device 10 executing a selective transfer of any type, no less the transfer of claim 33, as required by claim 36. The examiner has failed to provide any rationale or evidence for the rejection of claim 36.

Page 4 of the office action states Rautila, at paragraphs 0030-0032, 0034, discloses the features of claim 37. However, appellant is unable to find any indication in paragraphs 0030-0032 and/or 0034 of Rautila disclosing software on a base station executing the transfer of claim 33, as required by claim 37. The examiner has also failed to provide any rationale or evidence for the rejection of claim 37.

Page 4 of the office action discusses claim 67, but fails to mention a converter device having an interface as defined by claim 67. Hence the office action makes no attempt to establish a prima facie case against claim 67.

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VIII. Conclusion

Rautila fails to disclose the requirements of independent claims 31, 33 and 53 of notifying a mobile device, via a narrow bandwidth, long-range link, that a network has data awaiting transfer to the mobile device from the network. The statement in the office action that transmitting a unique order number during operation 400 of Rautila is incorrect. Transmitting the unique order number occurs after a user of mobile device 10 has made a purchase as a result of that user accessing an electronic web page from shop server 40. In other words, in Rautila the user of mobile device 10 instigates access to the network. This is completely contrary to appellants' claims 31, 33 and 53 requiring notifying a mobile device, via a narrow bandwidth, long-range link, that a network has data awaiting transfer to the mobile device. The unique order number of Rautila is a data item, not a notification that a network has data awaiting transfer to a mobile device. If the unique order number were such a notification, the operations on Figure 4 of Rautila would not end immediately after the unique order number was transmitted to mobile device 10. Instead, Figure 4 and the description thereof would have disclosed a transfer of data to mobile device 10 after operation 400.

The examiner has made no attempt to explain adequately how Rautila discloses the scheduling feature of independent claim 63 or the features of dependent claims 36 and 37, related to selective transfer of data to a mobile device has result of execution by software on a mobile device and a base station of a network, respectively. In addition, the office action does not even mention the requirement of

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claim 67 for a converter device for use with a mobile telecommunications device and a network.

Based on the foregoing, Rautila does not anticipate any of appellants' independent claims and dependent claims 36, 37 and 67 are allowable on their own merits. Consequently, all claims are allowable and reversal of the rejection is in order.

Respectfully submitted,

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IX. Claims Appendix

31. Apparatus for transferring data from a network to a mobile device comprising:

a transmitter arrangement having differing narrow and wide bandwidth links for transmitting data from the network to the mobile device, the transmitter arrangement being arranged for notifying, via the narrow bandwidth link, the mobile device of data awaiting transfer thereto from the network, the transmitter arrangement being arranged for transferring the data to the mobile device via the wide bandwidth link and the narrow bandwidth, the wide bandwidth link having a shorter range than the range of the narrow bandwidth link; and

an arrangement for transferring the data from the network to the mobile device and for causing transfer of the data, via the wide bandwidth link, to the mobile device unless the mobile device is outside of the range of the wide bandwidth link, in which case the data are selectively immediately transferred to the mobile device via the narrow bandwidth or are subsequently transferred to the mobile device via the wide bandwidth link when the mobile device is in range of the wide bandwidth link.

33. A method of data transfer by using first and second communication links of differing bandwidths between a network and a mobile device, the first link having a narrower bandwidth and longer range than the second link, the method comprising:

notifying the mobile device of data awaiting transfer thereto from the network by transmitting a first signal from the network to the device via the first link;

transferring the data from the network to the mobile device by transmitting a second signal from the network to the device via the first link or the second link; and the transfer to the mobile device occurring via the second link immediately after the notifying step only if the mobile device is in the range of the second link, the transfer to the mobile device selectively occurring (a) immediately after the notifying step via the first link if the mobile device is not in the range of the second link or (b) subsequently to the notifying step via the second link when the mobile device is in the range of the second link.

- 35. The method of claim 33 wherein the selective transfer is executed in response to a user input at the mobile device.
- 36. The method of claim 33 wherein the selective transfer is executed by software on the mobile device.
- 37. The method of claim 33 wherein the selective transfer is executed by software present on a base station of the network, and further including transmitting data corresponding to the selective transfer to the mobile device via the first link.
- 38. The method according to claim 33 wherein the first link includes a public land mobile network.
- 39. The method according to claim 33 wherein the second link includes a wireless network.

- 40. The method according to claim 33 wherein the second link includes an unlicensed portion of the electromagnetic spectrum.
- 41. The method according to claim 40 wherein the first link includes a licensed portion of the electromagnetic spectrum.
- **42**. The method according to claim **33** wherein the first link includes a licensed portion of the electromagnetic spectrum.
- 43. The method according to claim 33 further including only temporarily forming at least one of the first and second links.
- 44. The method according to claim 33 further including transferring data to the mobile device from a second network via another wide bandwidth link after the mobile device has been notified via a narrow bandwidth link that it is to receive data from the second network.
 - 45. The method according to claim 33 further including the steps of:

transferring a decryption key from the network to the mobile device via the first link;

then transferring the data in encrypted form, based on the key, from the network to the mobile device via the second communication link.

46. The method according to claim 33 further including the step of determining the location of at least one of the mobile device and a base station of the second communication link by using GPS.

53. A data transfer system comprising:

a network, a mobile device, a first transmitter and a second transmitter, the network being adapted to contain data, the mobile device being adapted to receive signals from both the first and second transmitters, the first transmitter being adapted to transmit a first narrow bandwidth long-range signal to the mobile device via a first narrow bandwidth long-range channel, the first signal indicating data on the network are available to be transferred to the mobile device, the second transmitter being adapted to transmit to the mobile device via a second wide bandwidth short-range channel, a second wide bandwidth short-range signal including the data, the mobile device and the first transmitter being arranged for selectively causing the first transmitter to transmit the data via the first channel and enabling the mobile device to selectively receive the data via the first and second channels; the network being adapted to respond to a transmission resulting from an input by a user of the mobile device that the user wants to receive the data by transmitting the data to the second transmitter.

54. A system according to claim 53, wherein the first transmitter is arranged to operate at a frequency within the range selected from group (i) about 900 MHz to about 1900 MHz; (ii) about the 2 GHz band.

- 55. A system according to claim 53, wherein the second transmitter is arranged to operate at a frequency within the range of the order of 1 GHz to the order of a few tens of GHz.
- 56. A system according to claim 53, wherein the second transmitter includes a wireless LAN base station.
- 59. A system according to claim 53, wherein a plurality of the second transmitters are located at geographically different places.
- **60**. A system according to claim **53**, wherein the mobile device includes a GPS transceiver associated with it.
- 61. A system according to claim 53, wherein the second transmitter is arranged to transmit the position thereof via the second channel.
- 63. A method of transferring data between a mobile device arrangement and a network arrangement via first and second communications links between the device arrangement and network arrangement, the first and second links respectively having narrow and wide bandwidths and long and short ranges, the method comprising:

sending a first narrow bandwidth signal from a first of the arrangements to the second of the arrangements via the first link, the first signal indicating that the first arrangement is ready to transmit data to the second arrangement, then sending a second wide bandwidth

signal from the first arrangement to the second arrangement via the second link, the second signal including the data; and

scheduling the sending of the data from the first arrangement to the second arrangement via one of the first and second links, and transferring the data from the first arrangement to the second arrangement via one of the first and second links based on the schedule.

- 67. A converter device for use with a mobile telecommunications device and being adapted for use with a network, the converter device having an interface adapted to interface with (a) said mobile telecommunications device and (b) a wide bandwidth communication link such that the converter device is capable of causing the mobile telecommunications device to perform the method of claim 33.
- 69. The method according to claim 39 wherein the first link includes a public land mobile network.
- 79. The apparatus according to claim 31 wherein the narrow bandwidth link is adapted to transmit data indicative of the time it will take to transmit the data.
- 80. The apparatus according to claim 79 wherein the narrow bandwidth link is adapted to transmit data indicative of the cost to transmit the data via the narrow bandwidth link.

- 81. The apparatus according to claim 31 wherein the narrow bandwidth link is adapted to transmit data indicative of the cost to transmit the data via the narrow bandwidth link.
- 82. The method according to claim 33 wherein the narrow bandwidth link transmits data indicative of the time it will take to transmit the data.
- 83. The method according to claim 82 wherein the narrow bandwidth link transmits data indicative of the cost to transmit the data via the narrow bandwidth link.
- 84. The method according to claim 33 wherein the narrow bandwidth link transmits data indicative of the cost to transmit the data via the narrow bandwidth link.

X. Evidence Appendix

None.

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XI. Related Proceedings Appendix

None.

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